

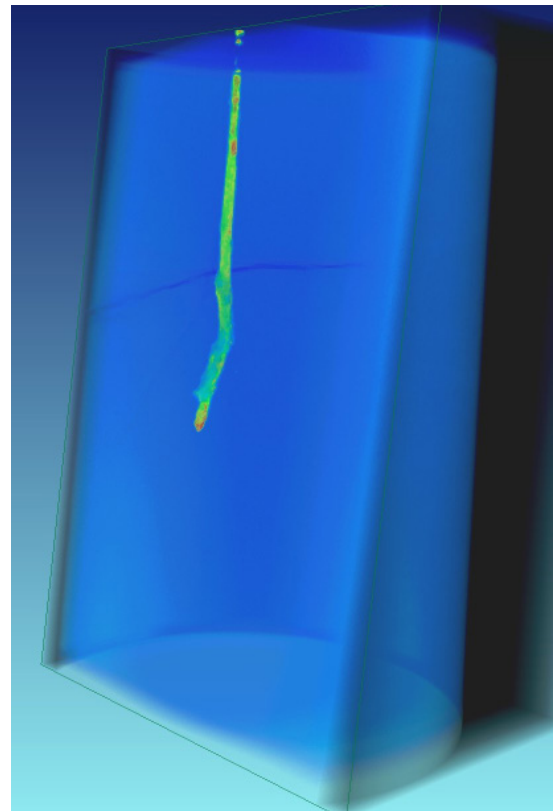


TESTING CAPABILITIES

Comprehensive Testing of Reservoir Optimized Completions

Core Laboratories continues to be at the forefront of perforating technology and developed an API RP-19B Section IV perforating flow laboratory, the Reservoir Optimized Completions Lab. This new facility will be able to determine true perforator performance and reservoir flow production in real rock by accurately reproducing wellbore and formation conditions. In conjunction with industry leading Core Lab technologies for formation, core, and fluid analysis this new facility will be able to go beyond traditional Section IV testing. The unparalleled technology combination offered by Core Lab along with full Ultra High Pressure & High Temperature capabilities means Core Lab can reproduce almost any real world reservoir condition. This data will allow you to design and optimize your completion in a cost effective lab environment, allowing you to capture the maximum productivity and value from your reservoir.

Section IV testing allows for customers to not only analyze the perforating performance, but also evaluate the entire completion design. From high speed wellbore pressures, dynamic underbalance, propellant stimulation, damage zone analysis, core flow efficiencies, all the way through Core Lab's enhanced rock properties, core and fluid analysis.



THE FACILITY

State-of-the-art 7000 sq. ft. perforator test facility specifically designed to provide the most realistic downhole reservoir test condition for analyzing and developing Reservoir Optimized Completions. With pressure conditions up to 30,000 psi, temperatures of 450°F, and full 180° angular orientation nearly any reservoir condition can be reproduced. Additionally, the benefit of on-site Computed Tomography (CT) scanning provides the customer with the most detailed evaluation possible of perforation geometry, debris and tunnel cleanup, formation fractures, and formation damage.

EVALUATION OF PERFORATORS UNDER DOWNHOLE CONDITIONS

	SECTION II	SECTION II+	SECTION IV	SECTION IV+
MAX OVERBURDEN PRESSURE	9,500 PSI	30,000 PSI	30,000 PSI	30,000 PSI
MAX FORMATION PRESSURE	9,500 PSI	30,000 PSI	30,000 PSI	30,000 PSI
MAX WELLBORE PRESSURE	-	20,000 PSI	20,000 PSI	20,000 PSI
MAX TEMPERATURE	-	450° F	-	450° F
ANGULAR ORIENTATION	-	-	-	0°-180°
MAX CORE DIAMETER	5.25"	9"	9"	9"
FLUID	OIL	OIL, BRINE, GAS	OIL, BRINE, GAS	OIL, BRINE, GAS
CT SCANNING	-	OPTIONAL	PRE & POST TEST	PRE & POST TEST
RESULT TYPE	TTP HOLE SIZE	TTP HOLE SIZE	TTP HOLE SIZE FLOW EFFICIENCY	TTP HOLE SIZE FLOW EFFICIENCY
OPTIONAL ANALYSIS		DUB OVERBALANCE STIMULATION	DUB OVERBALANCE STIMULATION	DUB OVERBALANCE STIMULATION CORE ANALYSIS DRILLING DAMAGE

ADDITIONAL TESTING CAPABILITES

- Mud cell for replicating drilling damage / fluid invasion zone
- On-site CT allows for additional in-process scans for flow & clean up analysis
- Micro CT scanning for further damage analysis
- Multi-casing string test setups
- Correlation to current Core Laboratories testing from
 - Petroleum Services
 - Integrated Reservoir Services
 - Stim Lab
 - ProTechnics



For the latest up-to-date information visit:
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Before you commit, be sure!